



'Finite to Fail but Infinite to Venture': Data Collection and Analysis in Complex Environments

Robert Grossman-Vermaas - Crisis, Conflict, and Governance
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International Business & Technical Consultants, Inc.

Alice: "Would you tell me, please, which way I ought to go from here?"

The Cheshire Cat: "That depends a good deal on where you want to get to."

Alice: "I don't much care where –"

The Cheshire Cat "Then it doesn't matter which way you go."

- Lewis Carroll

Introduction

- ▶ How to use data; how to use information; and, **why?** **We need to know where we're going;**
- ▶ Once these questions are answered the next logical step is to determine **how** to collect and analyze these data and **why?**;
- ▶ IBTCI designs and implements data collection and projects worldwide. We work in **fragile and conflict-affected states** including Afghanistan, Iraq, DRC, Syria, Somalia, Libya, etc.
- ▶ Activities include Performance Monitoring; Performance Evaluations; Impact Evaluations; Atmospherics; Surveys; Complexity-Aware Monitoring; Third-Party Monitoring and Verifications (M&V);
- ▶ Clients include, or have included, DoD, DoS, USAID, SIDA, CIDA, DfID, and NATO.

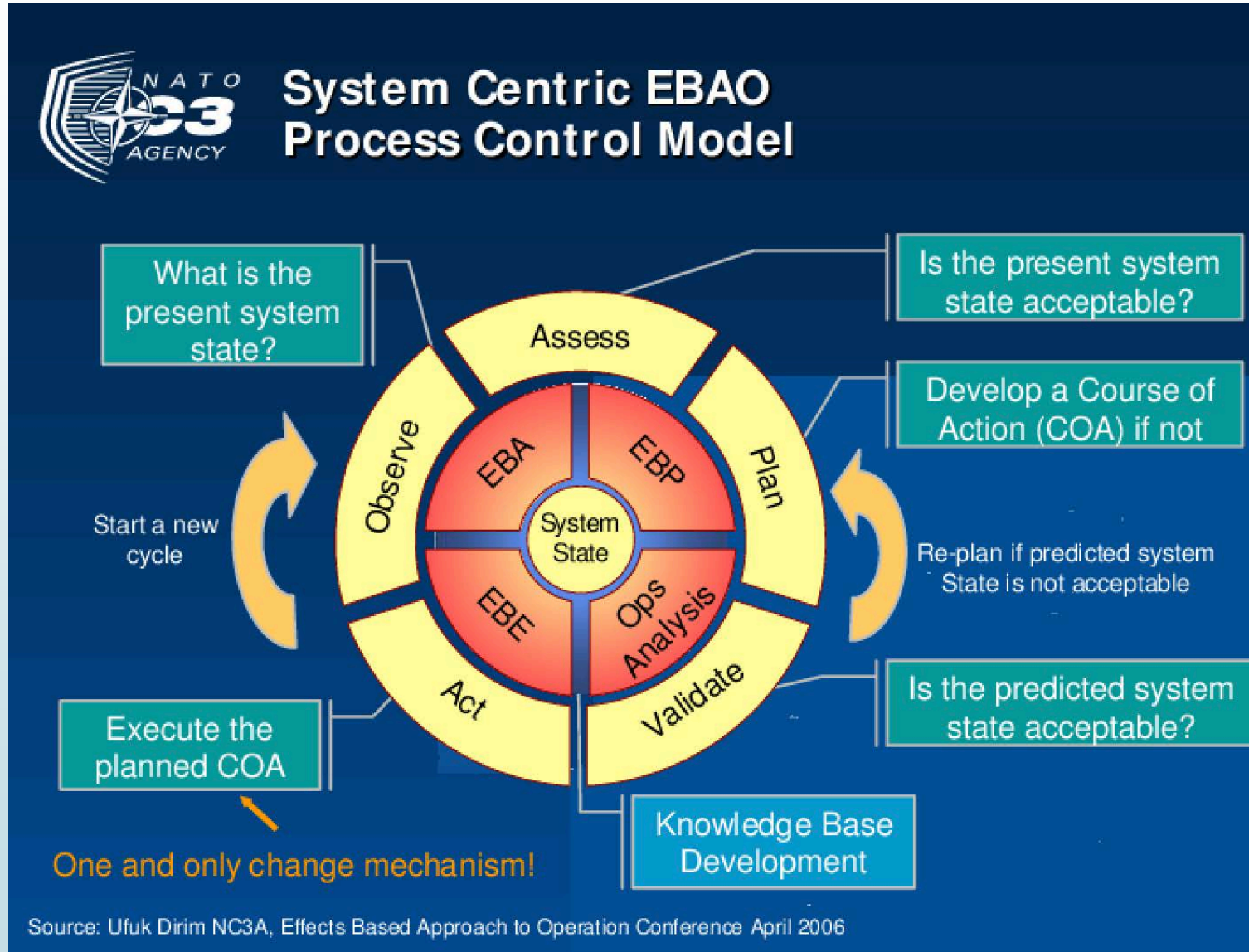
Assumptions

- ▶ As an organization, **NATO will continue to evolve** to better respond to a broader interpretation of its articles. NATO operations will be 'finite to fail but infinite to venture;'
- ▶ NATO planners, operators, and assessors are **interested in exploring alternative information needs, wants, and methods** to address the above;
- ▶ NATO planners, operators, and assessors **embrace innovation and the "whole of government"** approach to better understanding **outputs, outcomes, and impacts;**
- ▶ This presentation draws heavily on recent work in support of humanitarian assistance, stabilization, and development activities; this work mirrors concepts in the security sector

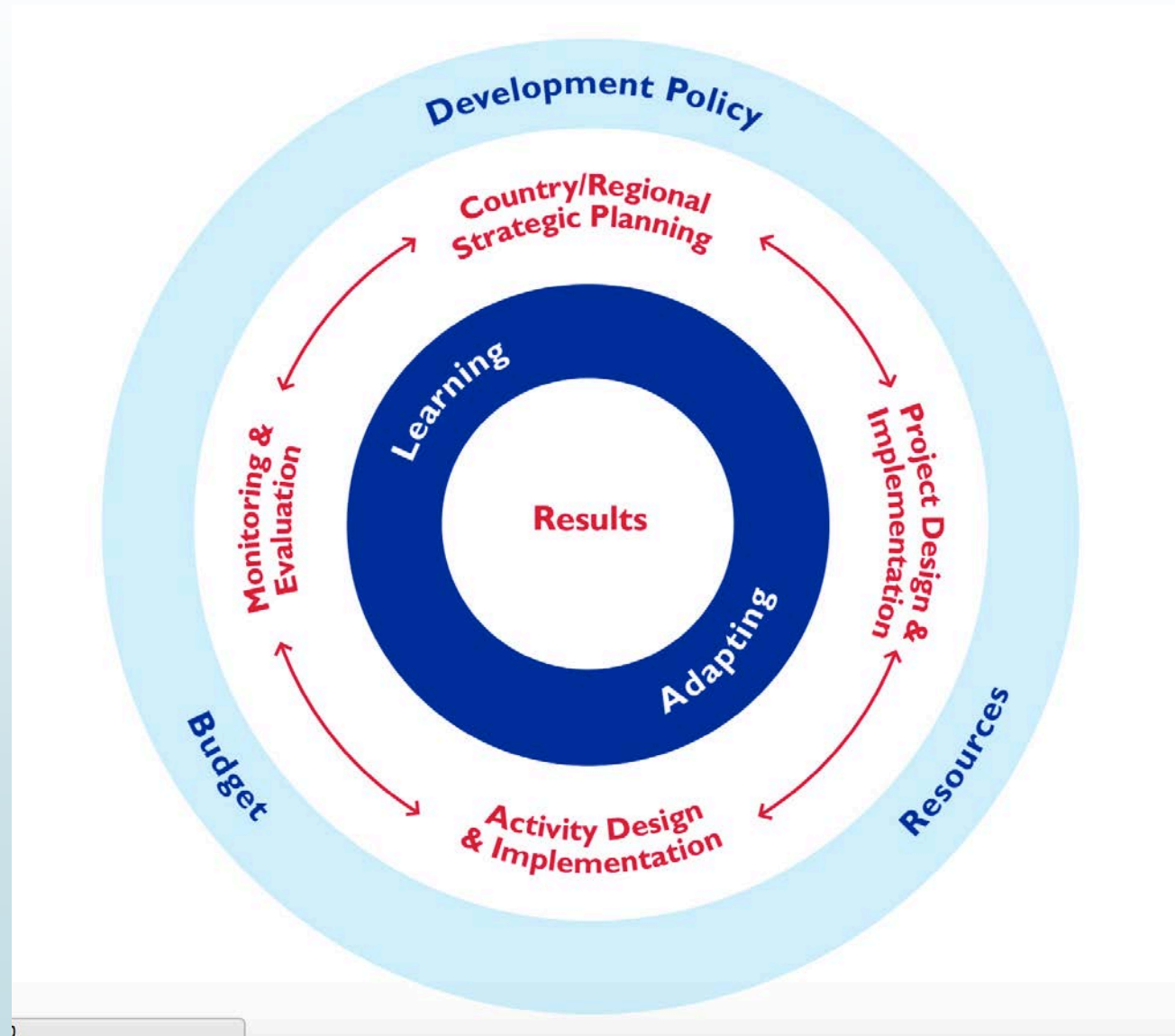
Structure – Problem Statements

- ▶ Current and future NATO operations will require for planning and assessment **more complete and comprehensive understandings of operational environments**;
- ▶ Current and future NATO operations will need to **quickly and defensibly demonstrate contribution to operational and tactical outputs, outcomes, and impacts**;
- ▶ **Why?**

The Effects-based Approach, 2006



The USAID Program Cycle, 2017



How can data best be gathered and analyzed in Complex Environments?

- ▶ Mixed methods and triangulation – which seems obvious;
- ▶ Perception-based, approaches (focus group discussions (FGDs) and interviews; population-based surveys); Knowledge, Attitudes, and Practices (KAP) surveys; and, Most Significant Change analysis;
- ▶ More innovative, quantitative, methods and sources such as remote sensing; mobile field collection; satellite imagery; drone imagery; remote mobile survey collection; crowd sourcing; LiDAR; SMS messaging; and predictive analytics;
- ▶ Multiple data methods = triangulation, corroboration, or refutation.

Mobile Survey Collection

Question 2 of 34

Community location

Location
Daraa

Coordinates
32.6263, 36.1032

P-Code
SEY-11203

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Question 4 of 34

Atmospherics

When was the community liberated?

Who is currently in control of the town?

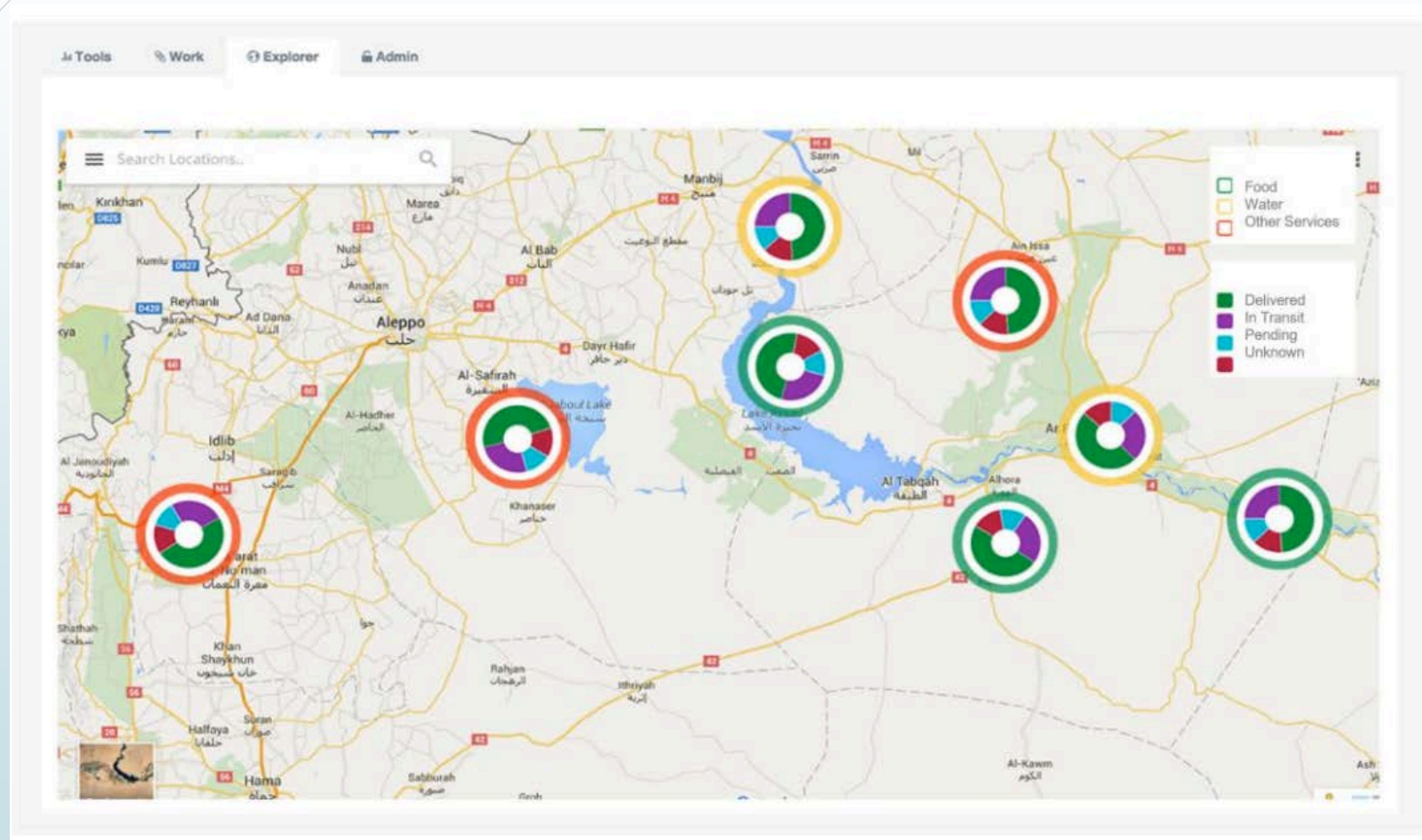
How frequently is the town subjected to threats?
weekly

What are the sources of the threats?

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Courtesy: Souktel

Visualization and Dissemination



Courtesy: Souktel

To what End...?

- ▶ As planners, operators, assessors, we need to know **where we're going, and why**;
- ▶ We need to know **if we've achieved outputs, outcomes and impacts according to our plans and if not, why not**;
- ▶ We need to **learn**, both operationally and organizationally;
 - ▶ To **course correct** when/where needed and to **adapt** to the dynamics of an evolving environment.

Example – Monitoring & Verification (M&V) in Complex Environments

- ▶ Planners, Operators, and Assessors may not have **full eyes on all of activities**, especially those in inaccessible areas;
- ▶ Planners, Operators, and Assessors may require better **or more holistic understanding of perceptions of effect on the ground**;
- ▶ **Triangulation of output and outcome data is essential** to determining kinetic and non-kinetic results;
- ▶ **Accountability and transparency are key** – the ‘Sopko Effect’;
 - ▶ [Sopko Effect](#)
- ▶ Monitoring & Verification (M&V) provides additional **“eyes and ears”** while being cost-effective and low-risk.

M&V

- ▶ Definitions of M&V are broadly analogous across different international donor organizations. In all cases **monitoring is seen as a repeatable activity designed to verify progress toward the achievement of output, outcome, and impact indicators;**
- ▶ Monitoring is not intended to act as an audit function, with the threat of punitive consequences for “poor” performance. It is meant to identify successful interventions, and any implementation challenges. **M&V is a learning tool;**
- ▶ Monitoring is physically observing and rigorously reporting **“what” was intended to happen in a particular activity, what actually happened, and why?** Although this is a simple idea in theory, it is far more complicated in practice, especially when implemented in fragile, conflict, and post-conflict environments

M&V

- ▶ The M&V process allows for stakeholders to assess the extent that intervention activities ensure greater **effectiveness and efficiency**. It seeks to answer the following:
 - ▶ Does the output exist? Did delivery of that output occur on time and without delay? Was the delivery within budget? Were the intended outcomes achieved?
- ▶ M&V also **assesses the coherence and logic of an activity** by analyzing relevant data gathered for specific intervention tasks.

Five Tiers of M&V

- ▶ Tier 1 is monitoring of activities by USG (or NATO) personnel;
- ▶ Tier 2 is monitoring by the activity partners, and includes data from respective reporting plans;
- ▶ Tier 3 is monitoring of activities through inputs from the USG (or NATO) network of partnerships with the local government and international donors also working in the same sector or region;
- ▶ Tier 4 is monitoring that may involve outreach to the partner country's civil society organizations or think tanks for sources of information;
- ▶ Tier 5 uses independent, third-party, objective, monitoring to monitor and verify USG or NATO activities.

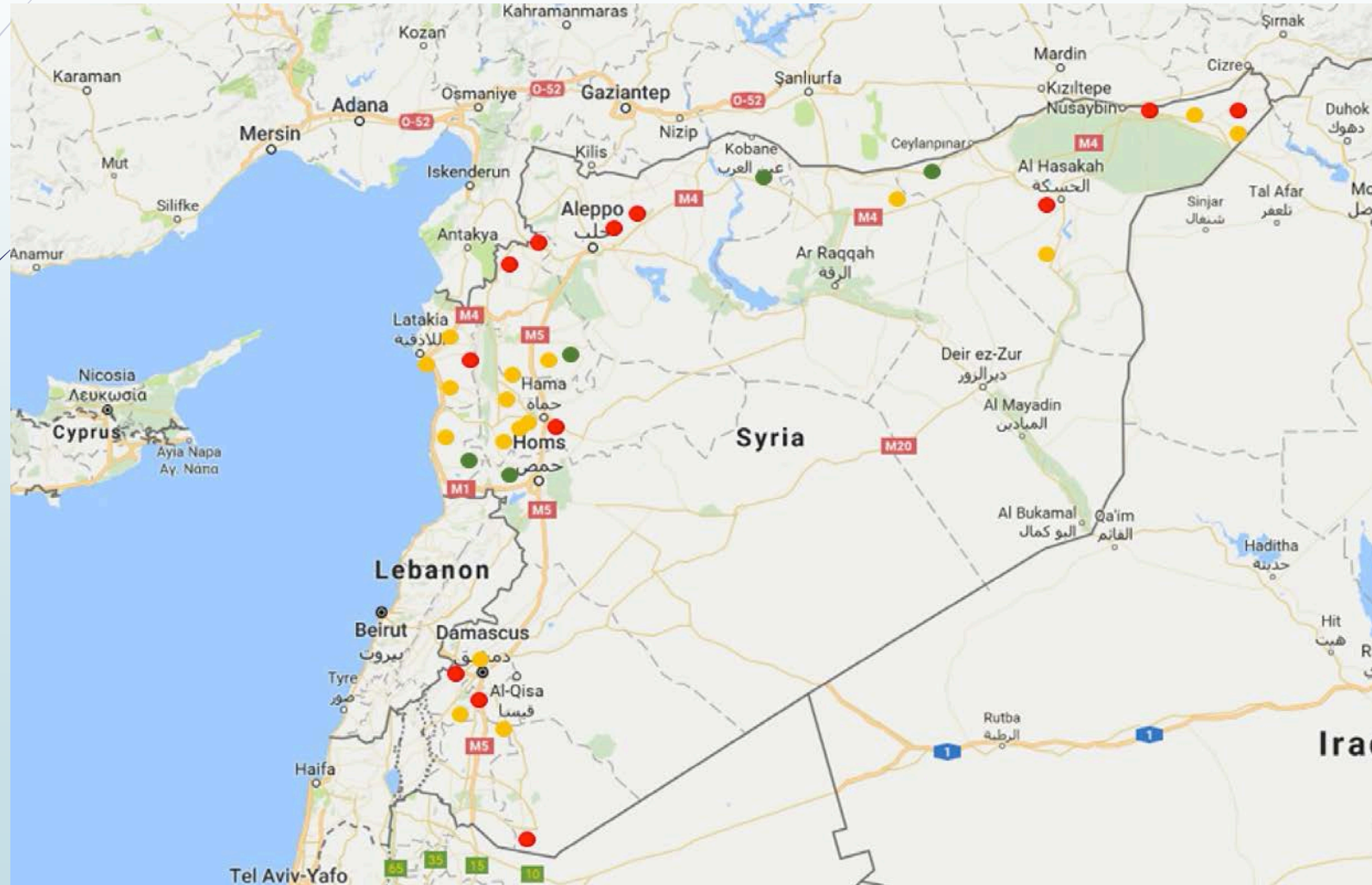
M&V

- ▶ Third-party monitoring includes local partners to **independently** monitor and verify activities of interest to USG (or NATO) that are carried out in less accessible areas;
- ▶ These findings would be backed by evidence and reported the client to quickly understand what is happening on the ground; the extent to which work is being delivered according to international standards; what challenges there are to the delivery of quality outputs; and, **whether there is a need to take prompt, corrective, action.**

M&V Process, Tools and Protocols

- ▶ The base collection unit is the “**site visit**” of high priority activities;
- ▶ Many of the instruments used in IBTCI’s M&V data collection activities are utilized across multiple projects. GPS devices are used for the geolocation of activity sites, digital cameras are used to document site activities and verifications, and paper M&V forms are (or were at one point) utilized across all of IBTCI’s M&V projects, with audio recording devices and smartphone- based data collection applications each utilized in two of IBTCI’s projects;
- ▶ Data collection methods are mixed, and include interviews, remote sensing, checklists, surveys, FGDs, and other quantitative and qualitative methods;
- ▶ There is a strong inclusion of *Do No Harm*, and conflict sensitivity training.

M&V Data Visualization – Progress toward Outputs and Outcomes



M&V – To What End?

- ▶ Verification of Outputs, Outcomes, and Impacts;
- ▶ Accountability – confirmation of what is happening;
- ▶ Adaptation and course-correction as needed;
- ▶ To become a learning tool for planners, operators and assessors;
- ▶ To become a learning tool for an organization.

Conclusions and Redux

- ▶ As an organization, **NATO will continue to evolve** to better respond to a broader interpretation of its articles. NATO operations will be 'finite to fail but infinite to venture;'
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- ▶ NATO planners, operators, and assessors **embrace innovation and the "whole of government"** approach to better understanding **outputs, outcomes, and impacts**;

Questions

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